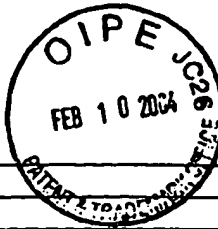


INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Use several sheets if necessary)

(37 CFR 1.98(b))



Atty Docket No.: 153454600010

Serial No.: 10/632,604

Applicant(s): Anguera Pros et al.

Filing Date: August 1, 2003

Group: Not Yet Assigned

U.S. PATENT DOCUMENTS

Exam. Init.		Patent Number							Issue Date	Patentee	Class	Subclass	Filing Date
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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

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TC	0	2	0	9	6	1	6	6	11/28/2002	PCT				
OTHER DOCUMENTS (Including Author, Title, Date**, Relevant pages, Place of Publication***)														
TC		Ali, M. et al., "A Triple-Band Internal Antenna for Mobile Hand-held Terminals," IEEE, pp. 32-35 (1992)												
TC		Romeu, Jordi et al., "A Three Dimensional Hilbert Antenna," IEEE, pp. 550-553 (2002)												
TC		Parker et al., "Convolutional array elements and reduced size unit cells for frequency-selective surfaces," IEEE Proceedings H, Vol. 138, No. pp. 19-22 (February 1991)												
TC		Hansen, R.C., "Fundamental Limitations in Antennas," Proceedings of the IEEE, Vol. 69, No. 2, pp. 170-182 (February 1981)												
TC		Jaggard, Dwight L., "Fractal Electrodynamics and Modeling," Directions in Electromagnetic Wave Modeling, pp. 435-446 (1991)												
TC		Hohlfeld, Robert G. et al., "Self-Similarity and the Geometric Requirements for Frequency Independence in Antennae," Fractals, Vol. 7, No. 1, pp. 79-84 (1999)												
TC		Samavati, Hirad, et al., "Fractal Capacitors," IEEE Journal of Solid-State Circuits, Vol. 33, No. 12, pp. 2035-2041 (December 1998)												
TC		Pribetich, P., et al., "Quasifractal Planar Microstrip Resonators for Microwave Circuits," Microwave and Optical Technology Letters, Vol. 21, No. 6, pp. 433-436 (June 20, 1999)												
TC		Zhang, Dawei, et al., "Narrowband Lumped-Element Microstrip Filters Using Capacitively-Loaded Inductors," IEEE MTT-S Microwave Symposium Digest, pp. 379-382 (May 16, 1995)												
TC		Gough, C.E., et al., "High Tc coplanar resonators for microwave applications and scientific studies," Physica C, NL, North-Holland Publishing, Amsterdam, Vol. 282-287, No. 2001, pp. 395-398 (August 1, 1997)												
TC		Radio Engineering Reference-Book by H. Meinke and F.V. Gundlach, Vol. I, Radio components. Circuits with lumped parameters. Transmission lines. Wave-guides. Resonators. Arrays. Radio waves propagation, States Energy Publishing House, Moscow, with English translation (1961) [4 pp.]												
TC		V.A. Volgov, "Parts and Units of Radio Electronic Equipment (Design & Computation)," Energiya, Moscow, with English translation (1967) [4 pp.]												
TC		Puente, C., et al., "Multiband properties of a fractal tree antenna generated by electrochemical deposition," Electronics Letters, IEE Stevenage, GB, Vol. 32, No. 25, pp. 2298-2299 (December 5, 1996)												
TC		Puente, C., et al., "Small but long Koch fractal monopole," Electronics Letters, IEE Stevenage, GB, Vol. 34, No. 1, pp. 9-10 (January 8, 1998)												
TC		Puente Baliarda, Carles, et al., "The Koch Monopole: A Small Fractal Antenna," IEEE Transactions on Antennas and Propagation, New York, US, Vol. 48, No. 11, pp. 1773-1781 (November 1, 2000)												
TC		Cohen, Nathan, "Fractal Antenna Applications in Wireless Telecommunications," Electronics Industries Forum of New England, 1997. Professional Program Proceedings Boston, MA US, May 6-8, 1997, New York, NY US, IEEE, US pp. 43-49 (May 6, 1997)												
Examiner										Date Considered				
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.														



INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
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Applicant(s): Puente Baliarda et al.

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Group: Not Yet Assigned

U.S. PATENT DOCUMENTS

Exam. Init.	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date
TC	5 4 5 3 7 5 1	09/26/1995	Tsukamoto et al.	343	700MS	
TC	5 4 9 5 2 6 1	02/27/1996	Baker et al.	343	846	
TC	5 5 3 4 8 7 7	07/09/1996	Sorbello et al.	343	700MS	
TC	6 0 9 1 3 6 5	07/18/2000	Demeryd et al.	343	700MS	
TC	6 2 1 1 8 2 4	04/03/2001	Holden et al.	343	700MS	
TC	6 5 2 5 6 9 1	02/25/2003	Varadan et al.	343	700MS	

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

Exam. Init.	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
TC	0 6 8 8 0 4 0	12/20/1995	EP			
TC	1 1 4 8 5 8 1	10/24/2001	EP			
TC	0 0 5 2 7 8 4	09/08/2000	PCT			
TC						

OTHER DOCUMENTS (Including Author, Title, Date**, Relevant pages, Place of Publication***)

Examiner

Date Considered

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